we shall find, however, that the Scelidothere and Armadillo closely agree: the outer facet of the fibular trochleæ, above described, is continued in the Scelidothere (Pl. XXVIII. fig. 2.), upon the fibular side of the astragalus reaching nearly half-way down the posterior part, and down nearly the whole of its anterior.

In the Armadillo, it extends over the whole of the anterior part of the outer side of the astragalus. In both animals the lower boundary of this articular surface describes a strong sigmoid curve.

In the Megatherium (Pl. XXVIII. fig. 1), the corresponding surface for the fibular malleolus on the outer side of the astragalus is formed by a comparatively very small semicircular flattened facet, which by its roughness indicates that the end of the fibula was attached to it by ligamentous substance, and that the synovial bag was not continued upon that surface as in the Scelidothere and Armadillo.

In the Mylodon (?) (Pl. XXVIII. fig. 4), even this rough facet is wanting and the fibular trochlea is bounded by the angle which divides the upper from the outer surface of the astragalus.

Turning now our attention to the under surface of the astragalus, we observe that it presents in the Scelidothere (Pl. XXVI. fig. 6), an irregular quadrate form, having the outer side occupied by an elongated sub-ovate articular facet, *e*, for the calcaneum, bounded externally by a sharp edge, with its long axis and its greatest concavity in the antero-posterior direction, and slightly convex from side to side: a second calcaneal articular surface *(f)* is situated at the inner and anterior angle; it is oblong and nearly flat; is continuous with the inferior concave facet of the scaphoid articulation, but is divided from the convex facet by a groove: the two calcaneal articulations are separated by a deep and rough depression, traversing the under surface of the astragalus diagonally, and increasing in breadth towards the posterior and internal angle. The inner side of the astragalus presents a convex protuberance.

The correspondence between the astragalus of the Scelidothere and Megathere is best seen at the under surface of the bone: in both the two calcaneal articulations are separated by the diagonal depression, and the internal and anterior surface is continuous with the scaphoid articulation. In the Megathere, however, in consequence of the absence of the inferior concavity which characterizes the Scelidothere, the anterior calcaneal facet (*f*) appears as a more direct backward continuation of the scaphoidal surface; but they are divided by a more marked angle than is represented in the figure (fig. 5, Pl. XXVI.). The posterior and outer calcaneal surface in the Megathere (*e*) is broader in proportion to its length, continued further upwards upon the outward surface, is consequently more convex in the transverse direction, and is not bounded externally by so sharp and prominent a ridge as in the

Scelidothere. The protuberance from the inner surface of the astragalus is more compressed laterally in the Megathere than in the Scelidothere. The correspondence between the astragali of the Mylodon (?) (Pl. XXVIII. fig. 6) and Megathere in the conformation of the under surface is so close, that the few differences which exist will be sufficiently appreciated by an inspection of the figures.

In the Armadillo the astragalus, in consequence of the greater production of its anterior part, presents more of an angular than a quadrate figure; and the scaphoid articular surface, being proportionally carried forwards, is altogether separated from the anterior calcaneal surface. The posterior and inner calcaneal surface resembles that in the Scelidothere, but is less inclined upwards; and is continuous with the posterior part of the tibial articular surface.

Thus the astragalus in the structure of its two most important articulations, viz. that which receives the superincumbent weight from the leg, and that which transmits it to the heel, presents a closer correspondence in the Scelidothere with that of the Dasypus, than with that of the Megathere or Mylodon.

The ungueal phalanx of the Scelidothere before alluded to, is represented of the natural size in Pl. XXVII. The side-view, fig. 3. shows the position of the articular surface on the proximal end, sloping obliquely towards the under surface, and overtopped by an obtuse protuberance, calculated to impede any upward retraction of the claw: the present joint, in fact, illustrates in every particular the argument by which Cuvier established the true affinities of the allied extinct genus Megalonyx.*

The present phalanx is, however, less compressed, and less incurved than those of the Megalonyx, which have been hitherto described; but it more resembles in these proportions one of the smaller, and presumed hinder, ungueal phalanges of the Megatherium. The upper and lateral parts of the bone are rounded, and it gradually tapers to the apex, which is broken off. The osseous sheath for the claw is developed only at the under part of the bone: it presents the form of a thick flat plate of bone, with the margin very regularly and obliquely bevelled off, and having a vertical process of bone attached lengthwise to the middle of its under surface. This process must have served for the insertion of a very powerful flexor tendon. The figures of this bone preclude the necessity of any further verbal description.

M. Lund lays most stress upon the argument founded on the inward inflection of the sole of the foot in the Megalonyx, and appeals with greatest confidence to this structure in support of his hypothesis of the scansorial habits of that extinct Edental.†

* Ossemens Fossiles, vol. v. part i. p. 163.

† For the translation of the following passage, and of others alluded to in the present work, from the original Danish Memoir of M. Lund, loc. cit., I am much indebted to the Rev. W. Bilton, M.A. &c. &c.:—